

ABSTRACT OF THE DISCLOSURE

A system and method for providing a timing reference on which data transmission between a network hub and a user terminal in a satellite-based communications network are based. The system and method employs an outroute hub, adapted to transmit a timing signal to a satellite in the network for receipt by the network hub and the user terminal. The system and method further employ a data transmission timing apparatus, disposed at the network hub and adapted to establish, based on the timing signal, the timing reference on which data transmission from the user terminal to the network hub is based. The timing signal can be a stream of data frames, such as Reed-Solomon frames, that are grouped into respective groups of data frames, and are numbered such that the data transmission timing apparatus establishes the timing reference based on the numbers assigned to the data frames.